



STATE OF WASHINGTON
DEPARTMENT OF LABOR AND INDUSTRIES
Prevailing Wage
PO Box 44540 • Olympia, Washington 98504-4540
360/902-5335 Fax 360/902-5300

July 26, 2012

Lori Otto
PCL Construction Services, Inc.
1109 A Street, Suite 110
Tacoma, WA 98402

Steve Pendergrass
Ironworkers 86
4550 South 134th Pl., Suite 103
Tukwila, WA 98168

Dear Ms. Otto and Mr. Pendergrass:

Thank you for your communications of January 17, 2012 and January 31, 2012, respectively, in which you requested a determination concerning the appropriate classification(s) of work for the installation of items that Ms. Otto describes as "stay-in-place (SIP) metal formwork," and which Ironworkers 86 describes as "decking and edgeform" being installed on the Murray Morgan Bridge Project in Tacoma by PCL Corporation (PCL).

Determinations of the prevailing rate of wage are made by the industrial statistician of the Department of Labor & Industries (L&I). See the attached document, "*Prevailing Wage Determination Request and Review Process*."

In considering this work and the appropriate worker classifications that pertain to it, I reviewed the extensive information provided to me by PCL, Ironworkers 86, and Pacific Northwest Regional Council of Carpenters (PN Carpenters). This information included:

- discussions with the various referenced parties about why the work should be classified as work performed by Ironworkers (WAC 296-127-01339) or Carpenters (WAC 296-127-01310),
- drawings and other specifications for the work,
- letters from various contractors regarding how they have assigned the same or similar work for other projects,
- photographs of the materials used on this project for the work at issue, and
- information regarding decisions concerning jurisdictional disputes that pertain to corrugated forming systems and SIP decking on bridge construction projects.

I also personally visited the site, observed the specific work in progress, and took photos which I later reviewed. Some of those photos are included as part of this determination. Additionally, I consulted with the Washington State Department of Transportation (WSDOT) and references to those consultations are included in this determination. Also, on May 8, 2012 I provided you and PN Carpenters with a draft of this determination and carefully considered all additional information I received regarding the draft prior to issuing the determination today.

The project under consideration is for the restoration of the Murray Morgan (11th Street) Bridge in Tacoma. It is not for the construction of a new bridge. The bridge "structure" is already in place.

It is my understanding that SIP forms are used to span the distance between bridge girders, providing a framework on bridges for installation of cast-in-place concrete decks. SIP forms are corrugated metal sheets permanently installed between the supporting superstructure members. Due to their corrugated cross-section, the forms are able to carry the dead load of the deck while the concrete cures. The corrugations of the forms run perpendicular to the girder lengths. After the concrete has cured, these forms, as the name indicates, remain in place, becoming a permanent component of the bridge superstructure. Although they provide no vertical support of the concrete deck slab *once the concrete has been cured* they possess tension and compression properties that may have an effect upon the overall functioning of the bridge superstructure over time.

Before SIP forms were invented, wooden, and later fiberglass formwork was used on bridges, and after curing of the concrete the formwork had to be removed. Installation and removal of this type of formwork is quite labor intensive and SIP metal forms provide an alternative to this effort. Interestingly, however, for WSDOT projects, on bridge decks, forms designed to stay in place made of steel or precast concrete panels are generally not used. Certain unique characteristics of this particular bridge project, however, prompted WSDOT to deviate from that general rule, and allowed the use of SIP forms. *See* Washington Bridge Design Manual [6-02.3(17)].

For installation of metal SIP forms on the Murray Morgan Bridge, workers constructed steel edgeforms which they welded directly to the girders. Here's a look at that process:



Following welding in place of the edgeforms, corrugated steel sheet decking SIP forms are screwed down onto the welded in place edge forms. Although I didn't get to see workers attaching the deck forms onto the edgeforms during my visit, many forms had been screwed into place and I was able to walk onto and view them closely.



Ironworkers 86 asserts that all work in connection with attaching the edgeforms and fastening the SIP metal forms to the edgeforms is work that involves materials within the Ironworkers scope, is *structural* in nature and falls solely within the Ironworkers scope of work. However, Ironworkers 86 acknowledges that if the SIP forms were constructed of wood rather than metal, the work of attaching the forms to the edgeforms would fall within the Carpenters scope of work.

PN Carpenters state that the subject work is *non-structural* in nature, and is a concrete forming system that is clearly within the Carpenters' scope of work. They directed my attention to the fact that their scope of work specifically refers to building of *concrete forms*, and that this work should not be excluded from their scope of work because the forms used here are metal forms rather than made of wood. The Carpenters scope specifically includes "*materials that take the place of wood, such as...metals...*" See WAC 296-127-01310 (emphasis added). They also claim that welding is clearly within their scope of work.

Both Ironworkers 86 and PN Carpenters provided me with extensive materials supporting their positions. The materials for both entities included letters from various contractors stating that they routinely use the respective trade for the work at issue. The materials also contained jurisdictional dispute decisions regarding the work at issue, and some jurisdictions, depending on the facts at hand, found that the work should be assigned to Carpenters, and others found that the work should be assigned to Ironworkers. Other materials indicate that there are times when mixed crews are assigned the work, which is split up into segments in various ways.

Were there a project labor agreement (PLA) operative for this project, I would likely forego making any determination on the issue, deferring to the parties to work out their disagreement under the terms of the PLA. Whether the work on the job site is actually assigned to Carpenters or Ironworkers is not a matter that the department controls, rather it is the rate of wage that is

paid, depending on the scope of work tied to the work performed, which is the concern I will address here.

WAC 296-127-01310 describes the work of Carpenters, and includes in pertinent part:

For the purpose of the Washington state public works law, chapter [39.12](#) RCW, carpenters construct, erect, install and repair structures, structural members and fixtures made of wood, plywood, wallboard and materials that take the place of wood, such as plastic, metals, composites, and fiberglass, using carpenter hand tools and power tools.

WAC 296-127-01310.

WAC 296-127-01339 describes the work of Ironworkers, and includes in pertinent part:

For the purpose of the Washington state public works law, chapter [39.12](#) RCW, **ironworkers perform all work in connection with field fabrication and/or erection, installation, removal, wrecking and dismantling of structural, architectural and reinforcing iron and steel**, ornamental lead, bronze, brass, copper and aluminum, and plastics or other materials when used in place thereof.

The work performed by ironworkers includes, but is not limited to:

- Steel and metal houses and packaged buildings.
- **Bridges**, viaducts, cableways, tramways, monorails...
- All reinforcing work in connection with field fabrication, handling, burning, **welding** and tying of all materials used to **reinforce concrete structures**.
- The signaling, rigging, hoisting, aligning, bolting, riveting, or **welding of structural-steel members**.
- The unloading, loading, distributing, stockpiling, hoisting, rigging, and handling of materials used by ironworkers and all cleanup work.

Work process:

(1) Structural:

(a) Erecting:

- Connecting
- Fitting
- Hooking on
- Bolting up
- Torquing
- Signaling
- Preengineered buildings
- Sheeting...

(2) **Welding:**

(a) Acetylene **welding**

(b) Electric arc **welding**

- (c) Cutting and burning
- (d) Heliarc.

WAC 296-127-01339 (emphasis added).

In the Ironworkers scope of work, the introductory paragraph uses the word “all” preceding the described work, “*structural, architectural and reinforcing iron and steel...*” This language indicates an intent to carve out an exclusive portion of work within that classification. However, the Carpenters scope of work in its introductory paragraph is not so broad as to include “all” referenced work, although it does also speak to the fact that “carpenters construct, erect, install and repair *structures [and] structural members...* See WAC 296-127-01310 (emphasis added).

Typically, if the tasks and materials used to complete those tasks are described within both scopes of work and if the contribution to the project is structural, it is generally determined that the Ironworkers scope applies, because that scope includes “all” such work. If the contribution to the project is non-structural, it may be that the Carpenters scope could include such work. Characterization of the work at issue here as structural or non-structural is addressed by WSDOT in its Bridge Design Manual [6-02.3(17)] (see attached). In that publication, bridge “formwork” is described as a structural system that “contains the lateral pressure exerted by concrete placed in the forms.” Additionally, I’m advised by WSDOT that contractor forming plans are engineered (stamped by a PE) to ensure they are structurally sound. While WSDOT conclusions are not binding on the department and its interpretation and application of its scope of work rules, they are relevant and will be taken into consideration in our analysis, especially regarding technical factors.

Essentially, PN Carpenters assert that because the materials used for the SIP forms “take the place of wood” the work falls within the Carpenters scope of work. In support of this they offer the following:

Wooden forms have been used many times over the years and have stayed in place as long as they are treated. Wooden Tressles on railroad overpasses with concrete deck are an example. There are some older forms of bridges in existence that have concrete roadbeds. Carpenters have always done this work. Technology has changed a lot of that, and many newer bridges have gone to structural steel and/or concrete. Some are a composite of both.

They further state that it has been industry practice for Carpenters to form for concrete “with the evolving technology.”

I appreciate that both PN Carpenters and Ironworkers 86 provided me with examples indicating current industry practice regarding the assignment of the work on construction projects to their respective trades, and I appreciate PN Carpenters pointing out that application of various scopes of work may change with advances in technology. However, to interpret the Carpenters scope of work “take the place of wood” language literally could expand the Carpenters scope to include

Lori Otto
Steve Pendergrass
July 26, 2012
Page 6 of 6

nearly all the work to which other scopes of work apply, and would make the distinctions and the reasons for having other scopes of work meaningless. That approach is untenable.

In this particular situation, no documentation was provided, and I could locate none, to establish that wood has routinely been used to construct SIP forms supporting cast in place concrete on a bridge similar to the work that is currently being performed on the Murray Morgan Bridge. Wooden formwork that is removed after the concrete is cured simply does not serve the same purpose as the SIP forms.

Based on the nature of the work performed regarding these SIP forms, including the materials and processes used in the performance of that work, the construction and welding of the edgeforms to the bridge structure, and the installation of the permanent metal SIP forms, is structural work within the Ironworkers scope of work, and must be paid at the prevailing rate of wage for that work classification. It would be incorrect to apply the Carpenters prevailing rate of wage to this work.

This determination is based upon the specific facts referenced. If those facts change or are different from as stated, the response may differ as well.

If you have questions, or if I can be of further assistance, please let me know.

Sincerely,



L. Ann Selover
Industrial Statistician/Program Manager
Sela235@Lni.wa.gov
(360) 902-5330

cc: Doug Tweedy, Pacific Northwest Regional Council of Carpenters
Joe Baca, Pacific Northwest Regional Council of Carpenters
Leiter Hockett, Pacific Northwest Regional Council of Carpenters
Alan Paja, Representative, Pacific Northwest Regional Council of Carpenters
Kathy Swan, Pacific Northwest Regional Council of Carpenters
Tyler Vanderlinden, PCL

Prevailing Wage Determination Request and Review Process

RCW 39.12.015 is the basis for requesting a determination, since it provides:

All determinations of the prevailing rate of wage shall be made by the industrial statistician of the department of labor and industries.

If you disagree with a determination the industrial statistician provides, WAC 296-127-060(3) provides for a review process:

(3) Any party in interest who is seeking a modification or other change in a wage determination under RCW 39.12.015, and who has requested the industrial statistician to make such modification or other change and the request has been denied, after appropriate reconsideration by the assistant director shall have a right to petition for arbitration of the determination.

(a) For purpose of this section, the term "party in interest" is considered to include, without limitation:

(i) Any contractor, or an association representing a contractor, who is likely to seek or to work under a contract containing a particular wage determination, or any worker, laborer or mechanic, or any council of unions or any labor organization which represents a laborer or mechanic who is likely to be employed or to seek employment under a contract containing a particular wage determination, and

(ii) Any public agency concerned with the administration of a proposed contract or a contract containing a particular wage determination issued pursuant to chapter 39.12 RCW.

(b) For good cause shown, the director may permit any party in interest to intervene or otherwise participate in any proceeding held by the director. A petition to intervene or otherwise participate shall be in writing, and shall state with precision and particularity:

(i) The petitioner's relationship to the matters involved in the proceedings, and

(ii) The nature of the presentation which he would make. Copies of the petition shall be served on all parties or interested persons known to be participating in the proceeding, who may respond to the petition. Appropriate service shall be made of any response.

From: Lori Otto [<mailto:LOtto@pcl.com>]
Sent: Tuesday, January 17, 2012 7:27 PM
To: LNI RE Prevailing Wage Worker 1
Subject: Confirmation on prevailing wage classification

We will be installing stay-in-place metal formwork to pour concrete for a bridge deck. We are requesting confirmation from L&I that WAC 296-127-01310 (Carpenters) applies to this work. In the below e-mail, the project manager has provided information on the stay in place form system as well as included plan sheets and shop drawings for the work. Please let us know if there are any questions or if any additional information is needed to provide the confirmation on which classification applies to this work.

296-127-01309 << 296-127-01310 >> 296-127-01312

WAC 296-127-01310
Carpenters.

For the purpose of the Washington state public works law, chapter 39.12 RCW, carpenters construct, erect, install and repair structures, structures, materials that take the place of wood, such as plastic, metals, composites, and fiberglass, using carpenter hand tools and power tools.

The work includes, but is not limited to:

- Build rough wooden structures, such as concrete forms, scaffolds, wooden bridges, trestles, coffer dams, tunnel and sewer support, welding
- Install ladders, handrails, walkways, platforms and gangways.
- Install door and window bucks (rough frames in which finished frames are inserted) in building frame work and brace them with boards and nails.

Thank you,
Lori Otto
425-394-4202

From: Tim Gattie
Sent: Tuesday, January 17, 2012 3:40 PM
To: Lori Otto
Subject: RE: Murray Morgan Bridge Stay-In-Place Forms

Lori,

Attached is a drawing of the stay-in-place form system. To answer some of your questions:

- 1) The system is installed by attaching haunch angles to the bridge stringers. The form pans are then screwed down to the haunch angles using self-drilling screws.
- 2) It is non-structural. It is installed to support the weight of the rebar and wet concrete. It serves no purpose after the deck is cured and has no connection to the structure other than through the haunch angles.
- 3) I am attaching the two plan sheets and the shop drawings for the material for your reference.

Let me know if you need anything else.

Thanks,
Tim

Timothy J. Gattie, P.E. | PCL Construction Services, Inc.

Project Manager | Murray Morgan Bridge Rehabilitation

1109 A Street, Suite 110 | Tacoma, WA 98402

P 253.267.7133 | C 425.223.0606 | F 253.238.1709

tjgattie@pcl.com | www.pcl.com



CONSTRUCTION LEADERS



From: Lori Otto

Sent: Tuesday, January 17, 2012 2:49 PM

To: Tim Gattie

Subject: RE: Murray Morgan Bridge Stay-In-Place Forms

Tim. I spoke to L&I. They will need additional information to make a clarification on the wage determination for this work. Some of the information they are looking for includes, is it a structural component, how is it installed... They also would like the plan pages for this.

When you get a moment please give me a call to review.

Thanks,

Lori

Selover, Ann (LNI)

From: Iron Workers Local86 [dispatchreport@hotmail.com]
Sent: Tuesday, January 31, 2012 12:42 PM
To: Selover, Ann (LNI)
Subject: Pictures and Letters of Assignment
Attachments: 01311202.PDF; 01311201.PDF

Ann,

We are asking for a determination on the Murray Morgan Bridge project in Tacoma being performed by PCL Construction.

I have attached pictures of the decking and edgeform that is to be placed on this project. In addition there are letters of assignment from Ironworker contractors that have performed this work using Ironworkers on their projects. We do have more letters from other contractors who have performed this work with Ironworkers if needed.

This is not a form system. These materials will be permanently attached to the bridge girders by means of welding and fasteners.

We appreciate your time in this matter. Please respond to this email or contact Don Demulling at 206.380.3420.

Thank you,

Chris McClain
Local 86 Dispatcher

4550 s 134th pl. Suite # 102
Tukwila, WA 98168
Phone # 206.248.4246
Fax # 206.439.1069